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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,396	09/10/2004	Rafael San Pedro Guerrenabarrena	HERR1.001APC	1253

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EXAMINER	
ZHU, WEIPING	
ART UNIT	**PAPER NUMBER**
1742	

NOTIFICATION DATE	DELIVERY MODE
06/01/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
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Office Action Summary	Application No.	Applicant(s)	
	10/507,396	GUERRENABARRENA ET AL.	
	Examiner	Art Unit	
	Weiping Zhu	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) *4 and 5* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/10/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

The application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.4999, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted

I. Claims 1-3, drawn to a method for manufacturing high concentration minitablets;

II. Claims 4 and 5, drawn to a device for manufacturing high concentration manganese minitablets.

The inventions listed as I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature in Invention I is the process step requirement to prepare high concentration manganese minitablets with desired composition and particle sizes, which is not present in Invention II. The special technical feature in Invention II is the device to manufacture the high concentration manganese minitablets requiring a mix storage, a reception hopper, a compacting means, a honeycomb valve and other necessary components, which are not present in Invention I. Inventions I and II lack the same or corresponding special technical features. Therefore unity of invention is lacking and restriction is appropriate.

During a telephone conversation with Ms. Che S. Chereskin on May 24, 2007 a provisional election was made without traverse to prosecute the invention of I, claims 1-3. Affirmation of this election must be made by the applicant in replying to this Office action. Claims 4 and 5 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should the applicant traverse on the ground that the inventions are not patentably distinct, the applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

The applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Comments

2. The phrase "a mixture of powdered Mn Al" in line 4 of claim 1 should be changed to "a mixture of powdered Mn and Al".

It is not clear if the percentages used in claim 1 are percentages in weight.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dremann (US 4,171,215).

With respect to claims 1 and 2, Dremann ('215) discloses a method for manufacturing high concentration pellets for aluminum bath alloying comprising (col. 3, lines 8-33 and lines 53-61):

Mixing 50-90 wt.% of electrolytic Mn powder ground from chips of a chemical purity of 99.7% or more with at least 10 wt.% of atomized Al powder having an average particle size of less than 40 mesh (420 μm), wherein the ground manganese powder has a particle size of less than 30 mesh (595 μm) and contains less than about 50 wt.% of particles with a size of less than 44 μm.

The contents and the particle sizes of Mn and Al overlapping the respective claimed ranges. A prima facie case of obviousness exists. See MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the claimed ranges within the disclosed ranges of Dremann ('215) with expected success, because Dremann ('215) discloses the same utility over the entire disclosed ranges.

Dremann ('215) does not disclose the distribution of Al particle size and the percentage of fine Mn particles with a size of less than 100 μm as claimed. However, it is well held that discovering an optimum value of a result-effective variable involves only routine skill in the art. In re Boesch, 617, F.2d 272, 205 USPQ 215 (CCPA 1980). In the instant case, the Al particle size distribution and percentage of fine Mn particles with a size of less than 100 μm are result-effective variables, because they would directly affect the dissolution rate of the pellets in the Al bath as disclosed by Dremann ('215) (col. 1, lines 39-46). Therefore it would have been obvious to one skilled in the art to have optimized the result-effective variables in the process of Dremann ('215) for the desired dissolution rate of the pellets in the Al bath. See MPEP 2144.05 II.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dremann ('215) as applied to claim 1 above in view of JP 59-004999 A.

With respect to claim 3, Dremann ('215) does not disclose the claimed feature.

JP ('999 A) discloses controlling mixing powders through a detector and control circuit (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the powder mixing control system as disclosed by JP ('999 A) in the process of Dremann ('215) in order to suppress the fluctuation in the supply rate of powder and to make the quality of the resulted powder compact uniform as disclosed by JP ('999 A) (abstract).

Conclusion

5. This Office action is made non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ROY KING
SUPERVISORY PATENT EXAMINER
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